

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A heat exchanger plate (1) comprising a number of turbulence-promoting protuberances (4) which project from the plane (3) of the heat exchanger plate, wherein characterised in that

each of the protuberances (4) have has an isolated zone with a surface profile (6)
for promoting break-up of laminar boundary layers, and
the surface profile (6) ~~consists of~~ has spherical or ellipsoid segments.

2. (Currently Amended) The ~~A~~ heat exchanger plate (1) as claimed in claim 1, which together with a plurality of identical heat exchanger plates (1) is stackable in such a manner that the protuberances (4) in a first heat exchanger plate (1) are partially accommodated in the protuberances (4) in a second heat exchanger plate (1).

3. (Currently Amended) The ~~A~~ heat exchanger plate (1) as claimed in claim 1, in which the protuberances (4) are symmetrically arranged.

4. (Currently Amended) The ~~A~~ heat exchanger plate (1) as claimed in claim 1, in which the surface profile (6) has a profile depth that is considerably smaller than the depth of the protuberances (4).

5. (Currently Amended) The ~~A~~ heat exchanger plate (1) as claimed in claim 1, in which the surface profile (6) is concavely or convexly arranged relative to the protuberances (4).

6. (Currently Amended) TheA heat exchanger plate (1) as claimed in claim 1, in which the geometric transition between the plane (3) of the heat exchanger plate (1) and the protuberances (4) is provided with a radius.

7. (Currently Amended) TheA heat exchanger plate (1) as claimed in claim 1, in which the surface profile (6) together with the protuberances (4) forms a golf-ball-like structure.

8. (Currently Amended) A plate heat exchanger comprising heat exchanger plates (1) with turbulence-promoting protuberances (4) which are arranged in each heat exchanger plate (1), characterised in that

wherein each protuberance (4) has an isolated zone with a surface profile (6) for promoting break-up of laminar boundary layers, ~~said and the~~ surface profile (6) ~~consisting of~~ has spherical or ellipsoid segments.

9. (Currently Amended) TheA plate heat exchanger as claimed in claim 8, in which the heat exchanger plates (1) are arranged so that the protuberances (4) in a first heat exchanger plate (1) in connection with stacking are partially accommodated in the protuberances (4) in a second heat exchanger plate (1).

10. (Currently Amended) TheA plate heat exchanger as claimed in claim 8, in which the heat exchanger plates (1) are arranged in pairs with a first (10) pair of plates and a second (10')

pair of plates adjoining the first, in which pairs of plates (~~10, 10'~~) a first (~~1A~~) and a second (~~1B~~) plate are arranged with the protuberances (4) directed away from each other and in which pairs of plates a gap is arranged between the first (~~1A~~) and the second (~~1B~~) plate.

11. (Currently Amended) TheA plate heat exchanger as claimed in claim 8, in which the protuberances (4) in each heat exchanger plate (1) are symmetrically arranged.

12. (Currently Amended) TheA plate heat exchanger as claimed in claim 8, in which the surface profile (6) has a profile depth which is considerably smaller than the depth of the protuberances-(4).

13. (Currently Amended) TheA plate heat exchanger as claimed in claim 8, in which the surface profile (6) of each protuberance-(4) is concavely or convexly arranged relative to the protuberance-(4).

14. (Currently Amended) TheA plate heat exchanger as claimed in claim 8, in which the protuberances (4) together with the surface profile (6) form a golf-ball-like structure.

15. (New) The heat exchanger plate as claimed in claim 1, wherein the isolated zones are spaced from each other by a substantially flat zone at a bottom of the heat exchanger plate.

16. (New) The heat exchanger plate as claimed in claim 15, wherein the isolated zones are spherical or ellipsoid.

17. (New) The plate heat exchanger as claimed in claim 8, wherein the isolated zones are spaced from each other by a substantially flat zone at a bottom of a corresponding one of the heat exchanger plates.

18. (New) The heat exchanger plate as claimed in claim 17, wherein the isolated zones are spherical or ellipsoid.

19. (New) The plate heat exchanger as claimed in claim 9, wherein the protuberances of the first heat exchanger plate are smaller than the protuberances of the second heat exchanger plate.